

**REMARKS**

Claims 1-12 are all the claims pending in the application.

**Statement of Substance of Interview**

Applicant conducted a telephone interview with the Examiner on April 18, 2006, to discuss the rejections under § 112 first and second paragraph. In particular, Applicant discussed the rejections based on inadequate written description and new matter.

Regarding the Examiner's assertion that the amendment to claim 1 recites very specific measurements and angles, Applicant pointed out that this was merely a positive recitation describing a non-parallel arrangement. Thus, this feature does not recite a specific angle or measurement.

Regarding the amendment to claim 3, Applicant noted that the term oblong space was supported by, at least, Figure 3 item 4. One definition of oblong obtained from Merriam Webster Online is deviating from a square, circular, or spherical form by elongation in one dimension. Thus, this is supported by the noted elongation of the space 4 in Figure 3.

**Claim Rejections - 35 U.S.C. § 112, First Paragraph**

The Examiner rejected claims 1 and 3 under § 112, first paragraph as failing to comply with the written description requirement. The Examiner alleges that the claim contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor, at the time of the invention, had possession of the claimed invention.

In particular, the Examiner contends that the amendment to claim 1, i.e. "direction that is at an angle greater than zero degrees to the surface of the wiring board above which the light

emitting section is positioned.” The Examiner indicates that the claim recited very specific design-oriented limitations ( measurements and angles of light emitting surface), which is not taught in the specification. Applicant submits that contrary to the Examiner’s assertion, this is not a recitation of specific angles and measurements, but merely a positive recitation of something that is not parallel.

Further, with regard to claim 3, the Examiner contends that the recitation “the space is an oblong space” also contains new matter. However, Applicant submits that this term is supported, at least, by item 4 of Figure 3.

**Claim Rejections - 35 U.S.C. § 112, Second Paragraph**

The Examiner rejected claims 11 and 12 under § 112, second paragraph for including the terms “substantially” and “substantial.” The Examiner contends that these terms are not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Applicant respectfully request that the Examiner withdraw this rejection as the clarifying amendments to claims 11 and 12 render this rejection moot.

**Claim Rejections - 35 U.S.C. § 103 (a) - Claims 1-5 and 8-10**

The Examiner rejected claims 1-5 and 8-10 under § 103(a) as being unpatentable over Kimiaki (JP 2002/252687) in view of Sandelius et al. (US 6,850,776; “Sandelius”). Applicant respectfully traverses this rejection because the Examiner has failed to establish that the invention is *prima facie* obvious.

The Examiner alleges that Kimiaki teaches or suggests most of the features of independent claim 1, but concedes that Kimiaki is silent on the light emitting section have a light

emitting surface directed in a direction that is at an angle greater than zero degrees to the surface of the wiring board above which the light emitting section is positioned. (Office Action, pg. 4-5) Thus, the Examiner applies Sandelius alleging that it teaches a light emitting section (LEDs) having a light emitting surface directed in a direction that is at an angle greater than zero degrees to the surface of the wiring board above which the light emitting section is positioned.

As a motivation to combine, the Examiner contends that it would have been obvious to modify Kimiaki with Sandelius such that the light emitting section having a light emitting surface directed in a direction that is at an angle greater than zero degrees to the surface of the wiring board above which the light emitting section is positioned, to provide a method of directing the light source (LED) directly towards a light indicator window so that the user may more clearly see the light illuminating the light indicator window. (Office Action, pg. 5)

However, Applicant submits that the motivation provided by the Examiner is in fact counter to the teachings of Kimiaki and found nowhere within Sandelius. Furthermore, it is not obvious, without a proper motivation, to selectively pick and choose elements or concepts from the various references so as to arrive at the claimed invention by using the claims as a guide. *Ex Parte Clapp*, 227 USPQ 972 (Bd. Pat. App. & Interf. 1985). In making this rejection, the Examiner has merely found a recited feature (light emitting section LED) in a reference (Sandelius) and then manufactured a motivation for combining this reference with another.

First, the Examiner contends that it would be obvious to modify Kimiaki with a light emitting section having a light emitting surface directed in a direction that is at an angle greater than zero degrees to the surface of the wiring board to provide a method of directing the light source (LED) directly toward a light indicator window. Applicant submits that one of ordinary

skill in the art would not modify Kimiaki with Sandelius because (1) the proposed modification would not have a reasonable expectation of success.<sup>2</sup>

As Kimiaki clearly teaches that because the light from LED 4 is irradiated substantially vertically to transparent window 2 the transparent window 2 is lighted with substantially equal intensity of illumination, one of skill in the art would not be motivated to direct the surface of the light emitting section at an angle greater than zero degrees. (English Abstract, para. [57]) If the LED 4 of Kimiaki is so modified, the illumination would not be irradiated substantially vertically as taught, and thus, would not provide light to the window with a substantially equal intensity of illumination as suggested by Kimiaki. Thus, one skilled in the art would not have a reasonable expectation of success if this modification were made.

Because the Examiner has failed to provide a proper motivation to combine Kimiaki with Sandelius, Applicant respectfully submits that independent claim 1 is allowable over the applied combination. Additionally, Applicant submits that claims 2-5 and 8-10 are allowable, at least because of their dependency.

Additionally, in the Advisory Action of June 21, 2006, regarding the rejection of claims 1-5 and 8-10 under § 103(a) over Kimiaki (JP 2002/252687) in view of Sandelius (US 6,850,776), the Examiner further alleges:

In this case, both references teach emitting light from a light source from within a mobile phone through a window on the case and it would be obvious that the light emitted in a direction that is at an angle greater than zero degrees to the surface of the

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<sup>2</sup> The proposed modification of the prior art must have had a reasonable expectation of success, as determined from the vantage point of the artisan at the time the invention was made. *Amgen, Inc. v. Chugai Pharm. Co.*, 927 F.2d 1200, 1209 (Fed. Cir. 1991)

wiring board above the light emitting section would provide easier viewing for the user.

Kimiaki clearly teaches that the light from the LED is irradiated substantially vertically to transparent window 2 the transparent window is lighted with substantially equal intensity of illumination, so it is obvious that the light emitting section is at an angle greater than zero degrees (English Abstract, i.e. 4).

In response to these additional comments from the Examiner, Applicant submits that with regard to the Kimiaki/Sandeliuss combination, both references teach that the emitted light is provided in a direction perpendicular to the surface of the window and, thus, one would not modify Kimiaki with Sandelius to orient the light emitting surface of Kimiaki to orient the light emitting surface at an angle greater than zero degrees to the wiring board if this does not emit light perpendicular to the window surface. The Examiner has failed to consider the teachings of the reference as a whole and, selective picks a single element, the LED from Sandelius emitted in a direction that is at an angle greater than zero degrees to the surface, and attempts to combine this with Kimiaki. However, because both Kimiaki and Sandelius teach that light is to be emitted directly toward the window surface, the Examiner is ignoring the teachings of the references to merely select an element using hindsight analysis (*See* Sandelius, col. 4, lines 30-34 and Kimiaki, English Abstract). Therefore, Applicant continues to submit that the Examiner has failed to establish *prima facie* obviousness.

**Claim Rejections - 35 U.S.C. § 103(a) - Claim 6**

The Examiner rejected claim 6 as being unpatentable over Kimiaki and Sandelius in further view of Ariga et al (US 5,486,816; "Ariga"). Applicant respectfully traverses this rejection for the following reasons.

Applicant respectfully submits that the Examiner is again picking and choosing elements or concepts from the various references so as to arrive at the claimed invention by using the claims as a guide. *Ex Parte Clapp*, 227 USPQ 972 (Bd. Pat. App. & Interf. 1985) There is simply no teaching or motivation within any of the cited references to modify either Kimiaki or Sandelius with the side-emitting diode of Ariga. Additionally, Ariga fails to compensate for the above noted deficiencies of the Kimiaki and Sandelius combination.

As an initial matter, there is no suggestion to one skilled in the art to combine the teachings of Ariga with those of Kimiaki. One reason is that Ariga is non-analogous art. It has been held that a reference is non-analogous art where the reference is : (1) not within the Applicant's field of endeavor; nor (2) reasonably pertinent to the problem to which the invention was directed. See *In re Oetiker*, 977 F.2d 1443, 1446 (Fed. Cir. 1992); MPEP § 2141.01(a).

Kimiaki concerns a method of illuminating a window of a communication terminal in homogeneity by using a refractive sheet to redirect the emitted light. In contrast, Ariga addresses photoelectric smoke detection and the problem of broken lead terminals resulting from bending stresses incurred when positioning a light emitting diode on a circuit board. Ariga solves the problem of broken lead terminals by using a side emitting type diode. There is absolutely no similarity between the field of endeavor (i.e. window illumination and photoelectric smoke detection) in these references, or the problems they attempted to resolve (i.e. homogenous lighting and broken lead terminals). Additionally, in the present Application, Applicant does not allege to have invented the side emitting type diode. Nor was Applicant concerned with the bending stresses in lead terminals.

On the contrary, Applicant's invention solved a problem with the invention of Kimiaki and unrecognized by Kimiaki, wherein the thickness of the communication terminal must increase in order to maintain a homogenously illuminated window when the window size is increased. There is no reason why one skilled in the art faced with the Kimiaki and Ariga references would have recognized the problem of increased device thickness with a corresponding increase in window size. Further, even if one skilled in the art did recognize the problem, there is no teaching or motivation present in the references to combine Ariga with Kimiaki to arrive at the claimed invention. Thus, the only motivation to combine these two references comes from impermissible hindsight using the Applicant's claims as a guide.

Thus, Applicant respectfully submits that claim 6 is allowable, at least because of its dependency from claim 1 and, additionally because the attempted combination forwarded by the Examiner lacks the necessary suggestion or motivation to combine.

Additionally, in the Advisory Action of June 21, 2006, with regard to the rejection of claim 6 the Examiner states:

In this case, all references teach of LEDs, and the Examiner is utilizing the Ariga reference to show that the side emitting LED is well known in the art and it would have been obvious for an artisan skilled in LED's, used for the purposes of illuminating an indicator.

Applicant submits that one of skill would not look to the position of a light emitting element 30 used for detecting fire and which is located inside a fire detector. This reference is unrelated to using an LED to illuminate a window. Thus, Applicant submits that Ariga is non-analogous art.

**Claim Rejections - 35 U.S.C. § 103(a) - Claim 7**

The Examiner rejected claim 7 as being unpatentable over Kimiaki and Sandelius in further view of Shang (US 3,727,115). Applicant respectfully traverses this rejection as follows.

Because Shang is merely teaches of a side emitting type diode, this reference fails to compensate for the above noted deficiencies note above with regard to the Kimiaki/Sandelius combination. Thus, Applicant respectfully submits that claim 7 is allowable, at least because of its dependency from claim 1.

**Claim Rejections - 35 U.S.C. § 103(a) - Claim 11-12**

The Examiner rejected claim 11 and 12 under § 103(a) as being unpatentable over Kimiaki in view of Applicant's Admitted Prior Art ("APA"). Applicant respectfully traverses this rejection because neither the APA nor Kimiaki, alone or in combination, teach or suggest "a light mixing space . . . adjacent in a first direction to the window section; and a light emitting section positioned such that light is emitted in a second direction different from the first direction," as recited.

To the contrary, as shown in FIG 1B, surface emitting diode 11 emits light in a direction (D) parallel to the direction in which mixing space is adjacent to the lens 3. Thus, the light from diode 11 is emitted in a second direction which is in the same direction as the direction from which the color mixing space 12 is adjacent to the lens 3. Therefore, the APA does not disclose, teach or suggest that "light is emitted in a second direction different from the first direction," as recited.

Thus, Applicant submits that claim 11 is allowable over the applied combination. Furthermore, claim 12 is allowable, at least because of its dependency.



**Conclusion**

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'D. Emery', written over a horizontal line.

David P. Emery  
Registration No. 55,154

SUGHRUE MION, PLLC  
Telephone: (202) 293-7060  
Facsimile: (202) 293-7860

WASHINGTON OFFICE

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